

What is claimed is:

Subj 1. A data processing system comprising: a master processor; a slave processor; a memory; and a bus subsystem interconnecting the master processor, the slave processor, and the memory; wherein the master processor is configured to generate, in response to a memory access instruction, a read request comprising a read command for execution by the slave processor to read data stored in a location in the memory specified by the memory access instruction, and to write the read request to the slave processor via the bus subsystem, and the slave processor is configured to execute the read command received in the read request from the master processor to obtain the data stored at the specified location in the memory and to write the data obtained to the master processor via the bus subsystem.

5 2. A data processing system as claimed in claim 1, wherein the bus system comprises two buses interconnected by a bridge device and the slave processor is integrated in the bridge device.

10 20 3. A disk controller comprising: a master processor; a slave processor; a memory; and a bus subsystem interconnecting the master processor, the slave processor, and the memory; wherein the master processor is configured to generate, in response to a memory access

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instruction, a read request comprising a read command for execution by the slave processor to read data stored in a location in the memory specified by the memory access instruction, and to write the read request to the slave processor via the bus subsystem, and the slave processor is configured to execute the read command received in the read request from the master processor to obtain the data stored at the specified location in the memory and to write the data obtained to the master processor via the bus subsystem.

4. A method for reading data from a memory in a data processing system comprising a master processor, a slave processor, a memory, and a bus subsystem interconnecting the master processor, the slave processor, and the memory; the method comprising:

generating, by the master processor, in response to a memory access instruction, a read request comprising a read command for execution by the slave processor to read data stored in a location in the memory specified by the memory access instruction;

writing, by the master processor, the read request to the slave processor via the bus subsystem;

executing, by the slave processor, the read command received in the read request from the master processor to obtain the data stored at the specified location in the memory; and,

writing the data obtained to the master processor
via the bus subsystem.